

THE SQUARE

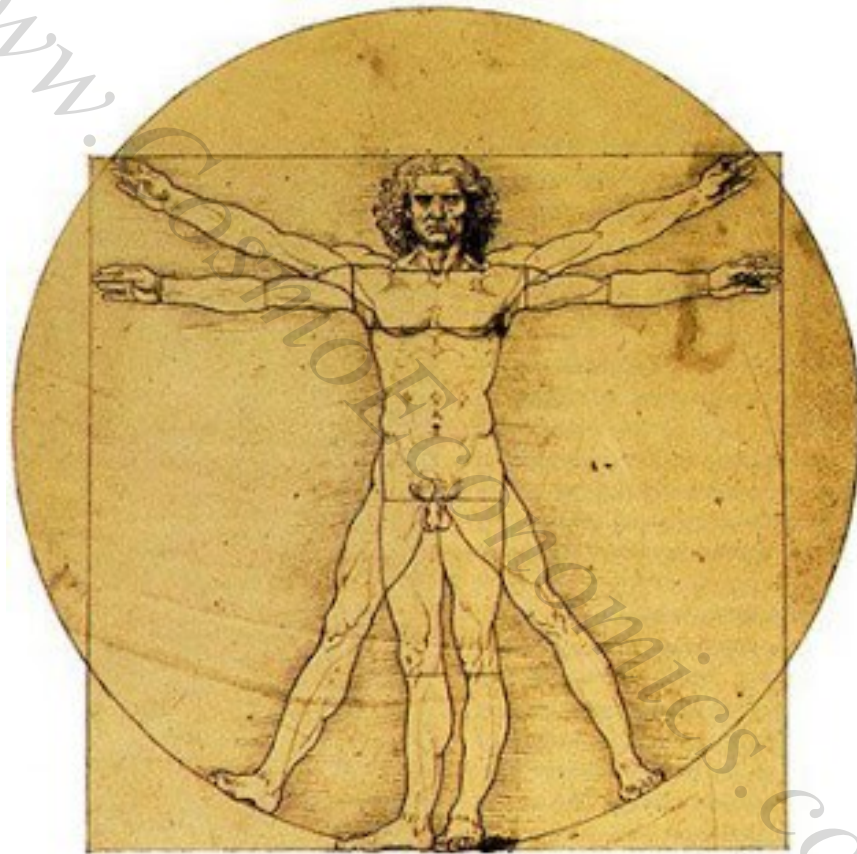
QUANTITATIVE ANALYSIS OF

FINANCIAL PRICE STRUCTURE

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THE SQUARE

QUANTITATIVE ANALYSIS OF FINANCIAL PRICE STRUCTURE



BY

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COSMOLOGICAL ECONOMICS

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PUBLISHER'S PREFACE

The search for order within chaos is a quest that stretches back to the earliest reaches of human thought. Since ancient man's first development of science and philosophy, two fundamental positions have vied for dominance. One claims randomness to be the underlying factor of the universe, while the other argues that order pervades this entire cosmos, and that the perception of randomness is merely an artifact of an ignorance yet to be penetrated. As humanity advances from one scientific revolution to the next, from Renaissance to Enlightenment, through Einstein's Relativity to high energy particle physics, pushing ever forward into sciences of greater order like Chaos and Complexity Theory, Superstring Theory, and M Theory, one thing is forever assured, that where once chaos reigned, now order dominates!

Yet still we see the argument of these random theorists persist within fields that their limited viewpoints are incapable of penetrating, arguing with all the passion of the religious fundamentalist that the claim of order in some complex systems is even anti-scientific, when in reality, such discovery represents the epitome of scientific method. So too does the modern financial analyst who *believes* in Random Walk Theory fail to perceive the subtle designs behind the complex system of the financial markets, denying even the possibility of order because his limited tools are incapable of measuring or perceiving it.

And *belief* this is, for when order is proven to exist where before was only randomness, the light of knowledge illuminates the Truth, and no logical mind will bend again to such false interpretations, once this truth has been seen. Only the irrationality of indoctrinated *belief* can hold something to be random which

the tools of science and mathematics have proven to be ordered. The intent of this course is to shed the light of science into the chaos of randomness and to prove, once and for all, that order reigns in the financial markets, and that Random Walk Theory is merely the residual belief of an ignorant past incapable of penetrating the complexities of this abstract system.

This science is not new. In fact, its application was first demonstrated over a century ago by the legendary trader, W. D. Gann, in his 1909 interview with Richard Wyckoff in *The Ticker & Investment Digest*, a precursor to the Wall Street Journal. For this famous interview, Gann was first audited by an accountant for the paper who monitored his trading over a 25 day period, where out of 286 trades, 264 were profitable with only 22 losses, a 92% success rate, producing a 1000% return on his initial capital, one of the greatest documented trading records in the history of the markets.

In this article, Gann elaborated some general foundational principles which formed the basis of his system, saying, *"Science teaches that an original impulse of any kind finally resolves itself into periodic or rhythmical motion, just as the pendulum returns again in its swing, so do the properties of the elements periodically recur as the weight of the atoms rises. Stocks, like atoms, are really centers of energies, therefore they are controlled, mathematically. Stocks create their own field of action and power; power to attract and repel..."*

He further explained, *"This led me to conclude that natural law was the basis of market movements. After exhaustive researches and investigations of the known sciences, I discovered that the Law of Vibration enabled me to accurately determine the exact points to which stocks or commodities should rise and fall within a given time. The working out of this law determines the cause and predicts the effect long before the Street is aware of either. Most speculators can testify to the fact that it is looking at the effect and ignoring the cause that has produced their losses."*

After these brief comments providing some initial hints as to the nature of his system, Gann continued a 45 year career, during which he is rumored to have extracted \$50 million from the markets in the early 20th century. Over these years, he published a series of 7 books and dozens of advanced courses of private instruction, which seemingly presented only the more general principles of technical analysis and trading. However, through all of this output, the underlying mechanics of his system were never openly revealed, thus leaving the scientific proof of the mathematical determinism behind market action a tightly held secret which is thought to have accompanied him to the grave.

However, bits and pieces of Gann's real system were subtly hidden amongst these more esoteric writings, or were secretly passed along through private hands over the decades, leaving a trail of clues for future seekers to pursue. The first known researcher to have successfully followed this trail of clues was Dr. Jerome Baumring of the Investment Centre, an iconoclastic savant, who after years of grueling research, managed to resynthesize Gann's complete system, and to extend it into new fields of science unknown to Gann in his time. Dr. Baumring presented this system in a complex course on Gann analysis in the 1980's, quantifying its application through advanced mathematics and expanding it into new fields like DNA coding and Chaos Theory.

However, much like his predecessor, Dr. Baumring refused to openly document the mechanics of the system, considering it too valuable to reveal to the general public. He did, however, leave an intricate trail through a labyrinth of resources that only the most dedicated researcher, willing to do the grunt work himself, could follow, with difficulty, to the goal, thereby assuring that the essence of the science would be accessible while remaining carefully hidden.

The author of this work, Catalin Plapcianu, is one of the few truly dedicated researchers to have successfully followed the trail of these

predecessors to the rediscovery of this long hidden science. The principles elaborated in this course will provide the foundational insight into the essence of this natural science so vaguely elaborated by Gann. These principles deal directly with the theory of the markets as energetic phenomena governed by the strict laws of physics and mathematics operating within the domain of space and time.

In this three part series, the author will document the systematic and mathematical foundations of this system, which have never before been revealed, with irrefutable clarity. Not only will core of this system be documented and quantified theoretically, it will also be quantified mechanically, through a series of programmed algorithms applied across a wide range of financial markets, in numerous time frames. Statistical trading results will be demonstrated that significantly outlie the known parameters of modern trading systems and technologies, producing results that would be considered impossible by traditional standards.

These statistics are reproducible by anyone who possesses this course, as the mechanics of the algorithms are fully presented herein, and access to the programmed indicators will be made available by subscription both to course owners and non-course owners alike, whereby these statistics can be backtested across history and validated through real-time trading.

We feel that this series will, for the first time, provide the undeniable proof that the financial markets, like all other natural phenomena, are governed by the inalienable laws of nature, and are therefore predictable, within certain parameters, as are all other natural phenomena.

William Bradstreet Stewart

Century City, CA, June, 2014

PREFACE

Does reality possess an absolute order in its course? This question has accounted for many sleepless nights and thousands of hours of pure work, the kind of work that has no trail to follow, no guide to spare the ineludible steps the mind relentlessly must undergo, no ancillary whisper which only the *lips of knowledge* can provide, just debris of a forgotten system, scattered over tens of thousands of papers, ranging from mathematics to philosophy, from physics to *harmonics*, rendering no aid to the mundane beholder in perceiving integrity among the parts, but instead bestowing concealment to the naked eye, confusion to the unprepared, and retaliation to the antagonist.

What is the driving force behind this process other than the aftermath of mediocrity? What can be more hazardous than contenting with averageness? Once it is realized that *mediocrity is self-inflicted and genius is self-bestowed*, there is no turning back, there is no back-door to avert to, no ocean big enough to quell the thriving ardor of the threshold lighted by a single spark of knowledge, there is only the inexorable thirst for more, until fulfillment runs its course.

It cannot be explained better than that nature desires evolution, hails for the adornment consequential of its understanding, and dismisses *new laws for natural phenomena* because there is *nothing new under the Sun*, just the old restated. Doubtlessly, fulfillment always serves nature's will with time being its sole distributor, until satisfaction has run its course, dispensing of the allocator.

Even the doubters of absolute order fell short with their systems when their own conclusions disputed their entire work: *"The final purpose of our creation seems most plausibly to be the greatest possible enrichment of our ethical consciousness,*

through the intensest play of contrasts and the widest diversity of characters.” (William James)

Even the far-reaching ideas of highly ranked seekers of order fell short when a flaw in judgment led them to choose the path of *an abstract space where objects interact*, instead of reasoning inductively of space being in space as *a simultaneous givenness of real things*.

Thankful as I am to the author of the never ending play, who lifted the concealing pall of ratiom to me, as much I am to you, my noble reader, to whom I dedicate this first part of a trilogy, in which lies my humble understanding of the whole, in hope of guiding you on our journey of becoming.

C. Plapcianu

May 2014, Milan, Italy

INTRODUCTION

So many works have been written on the subject of “market behavior,” yet none (at least none which I have seen) has touched the objectivity I was looking for. Technical Analysis with its “prophets” has failed miserably to show any sign of order in its goal. Sentences like “it’s a sell below the 50 Moving Average” or “a buy at the 13th close above this level” appear too technical to the un-experienced reader, but are in fact, lacking in any technicality whatsoever. They represent just some numbers thrown out there by their promoters’ limited experience in the markets, without providing any real foundation at all.

I propose a set of 3 volumes revealing a new approach to analyzing and trading the markets. This first volume, *The Square*, will be built around the **Price Swing Chart** and will provide the initial foundation for our two trading algorithms, the *Hyperbolic* and the *Circular*. The *Hyperbolic* algorithm will produce a sophisticated trend following system using advanced geometries which slice the market according to its acceleration and deceleration processes. The *Circular* will project future turning points in price and time.

As we advance through the series, the second Volume, *The Triangle*, will reveal the **Time Swing Chart**, expanding the analysis initiated in the first volume around price to the perspective of time, adjusting both algorithms to work from this angle. The third volume, *The Circle*, will reveal the **Master Time-Price Swing Chart**, which will integrate these two perspectives into the combined element of Price-Time, providing accurate projections on both axes.

As we progress through each of these sequential stages, our algorithms, the *Hyperbolic* and the *Circular* will evolve through 3 advancing levels into

more efficient and accurate technologies, producing greater profitability due to the refinements of their projections. These refinements will also allow the capability of higher account leveraging due to their continually improved accuracy and efficiency, further compounding their profit potential.

All three volumes will be concerned firstly with defining, identifying and ranking turning points, and secondly, with their prediction. I am not going to go into detail as to “why” I used such and such methods, but I will demonstrate that they work on any class of phenomena, be it a weather forecast, market behavior, or the movement of the planets around the sun.

Figure 15 exhibits the two variations of accelerating output hyperbolae on an actual price chart.



Figure 15

Bottom line, the inputs (deceleration processes), will *always* be considered of the types b) and d) while the outputs (acceleration processes), the ones used for the purpose of prediction and stop loss placement, will be considered of the types a) and c).

I propose a 5-step approach for determining the output curve:

1. The use of the price swing chart to identify the swings
2. Determining the total amount of energy on the chart
3. Determining the valid points
4. Applying the algorithm using the valid points
5. Conclusion

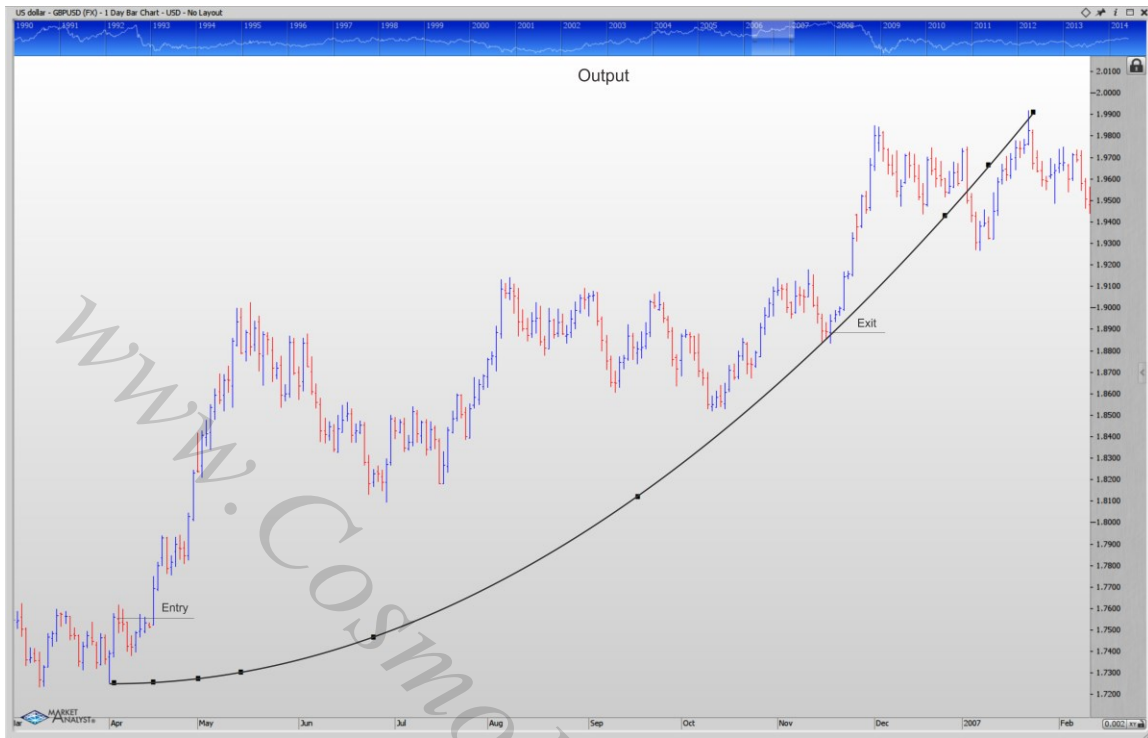


Figure 20

HYPERBOLIC EXAMPLE 2

Since steps 1, 2 and 3 have been shown in the previous chapters, we will leap directly to step 4, applying the hyperbolic algorithm.

STEP 4

Figure 21 below (Euro Dollar chart) depicts the first two swings in our data set, which also, as in the last example, quickly balance each other in terms of numbers (Bs and Ts), the first swing having (2B, 1T) while the second one balances it with (1B, 2T) resulting in a total energy of 8 EU (1PU = 110.5 pips), to validate our points. We will then apply the Input - Output process to create our hyperbolic curves as follows.

COMPLEX HYPERBOLIC PROJECTIONS

The chart below is intended to give a glimpse into the teachings of the next course where *The Hyperbolic (Part 2)* will be presented providing time and price projections using all 9 types of nonlinear distributions.

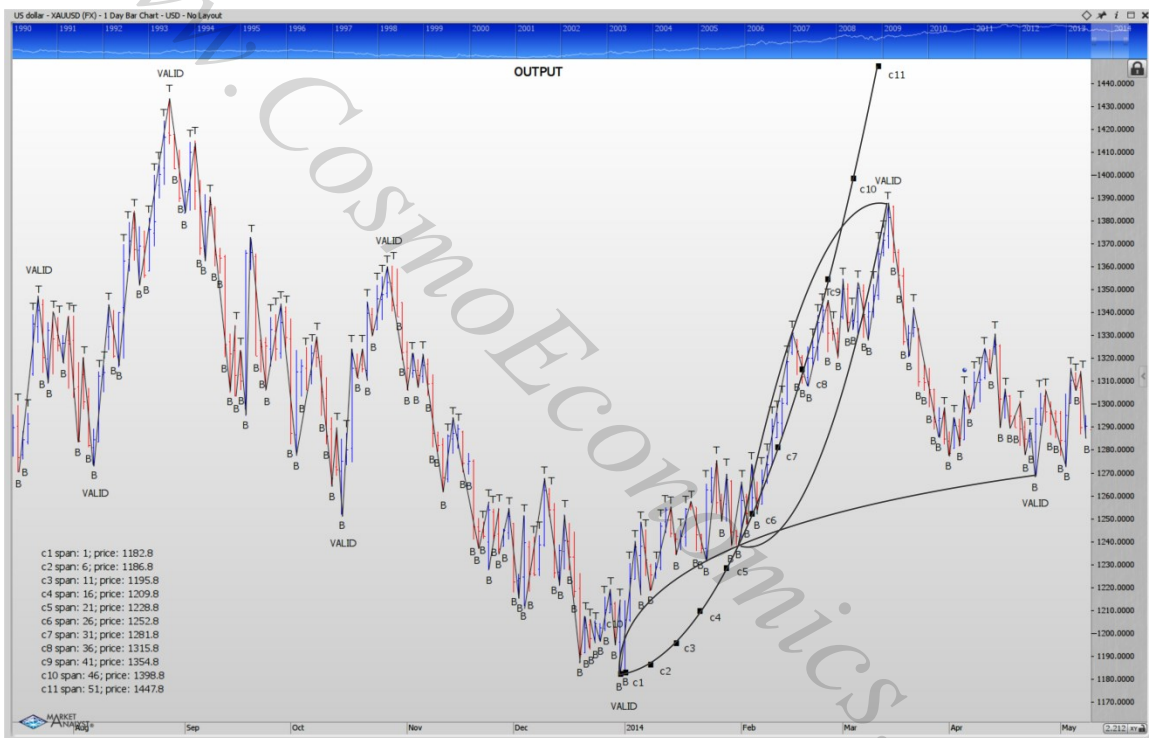


Figure 39

It does not take a huge stretch of the imagination to see what the figure would look like if we cut the tails of the 2 extending hyperbolae, leaving only the “figure eight” on the chart. It looks like a DNA plane projection.

CIRCULAR EXAMPLE 1 BTB

There are two different cases which three consecutive points can create, namely BTB and TBT (all being consecutive valid points). We will apply steps 4 and 5 first in a BTB series and then in a TBT series on the same chart, which has undergone steps 1, 2 and 3. First we will present the BTB series following.

BTB – STEP 4

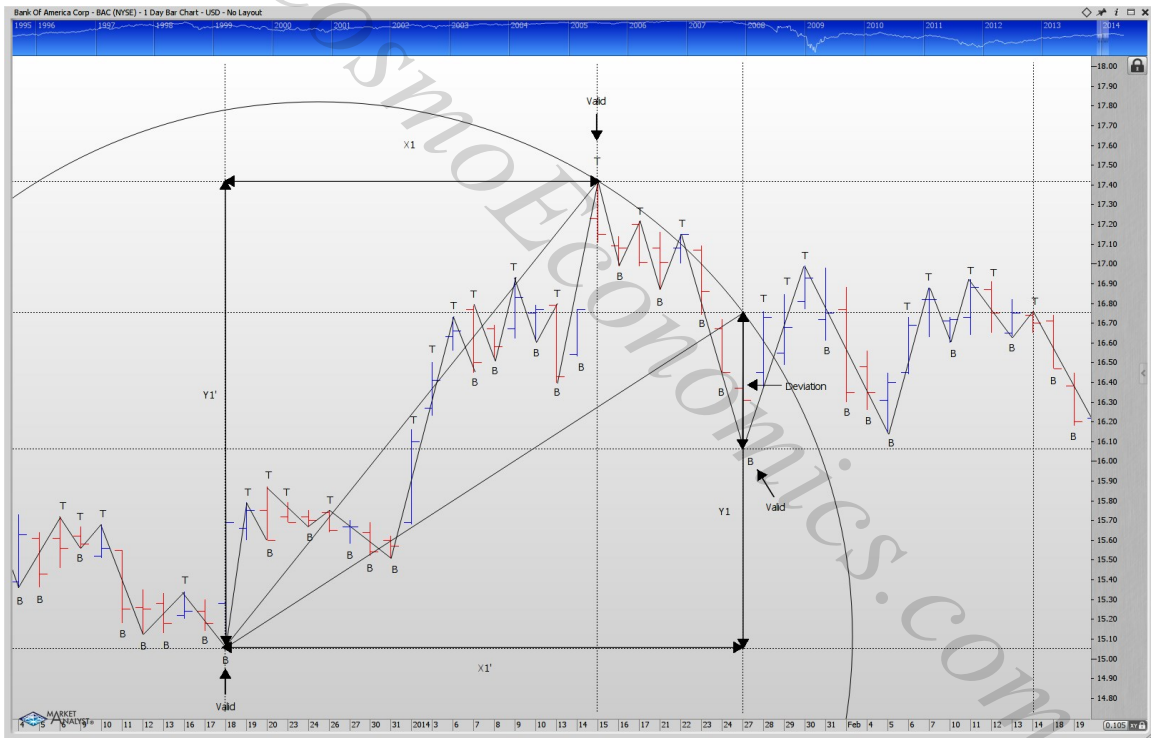


Figure 42

First, we have used the *Energy Conservation* principle to validate our points, making sure they are consecutive and have opposite polarity. Next, looking at **Figure 42** above, we will scale time and price. This is done simply by



Figure 46

- 1.1 yields (21, 22). So, beginning from point E, we count 21 time bars to the right for our X value. We then convert our Y coordinate from time units to price through our price/time ratio $\$2.36/25 = 0.0944 \times 22$ giving us our Y_1' value of 2.0768, added to the Y axis gives point G.
- 1.2 yields (21, 22). From point F we move 21 bars to the right on the X axis, and $22 \times 0.0944 = 2.0768$ points up the Y axis giving us point H.
- 2.1 yields (25, 18), so from point G, we move 25 bars to the right, and up $18 \times 0.0944 = 1.6992 Y_1'$.
- 2.2 yields (18, 25), so we move 18 X bars to the right from point H, and $25 \times 0.0944 = 2.36 Y_1$ up from point H.
- From these 2 conversions, both lines arrive at Point D, with coordinates (64, 65) and (64, 65) as shown below on **Figure 47**.